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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
087808,315	02/28/97	KINDOSHITA	2477PD-5385

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MM21/0604

EXAMINER  
LEUNG, Q

ART UNIT	PAPER NUMBER
2874	

DATE MAILED: 06/04/99

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
08/808,315

Applicant(s)  
Kinoshita et al

Examiner  
Quyen Leung

Group Art Unit  
2874



☒ Responsive to communication(s) filed on Mar 15, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-8 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-8 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2, 4

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## **DETAILED ACTION**

### ***Election/Restriction***

1. Applicant's election without traverse of group I, claims 1-8 in Paper No. 7 is acknowledged.
2. In response to the amendment filed on 3/15/1999 (paper no. 7), claims 9-16 have been canceled. Claims 1-8 are pending the case.

### ***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 2, 3, 4, 5, 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 4 and 8, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

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Regarding claims 4 and 8, the phrase "and the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

6. Claim 2 recites the limitation "the working plane" in line 3. There is insufficient antecedent basis for this limitation in the claim.

7. Claim 3 recites the limitation "the side face" in line 3. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 4 recites the limitation "the major plane" in line 4. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 4 recites the limitation "the side face" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 5 recites the limitation "the major plane" in line 4. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 5 recites the limitation "the cleaved plane" in line 5. There is insufficient antecedent basis for this limitation in the claim.

12. Claim 5 recites the limitation "the side face" in line 6. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

14. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by applicant's own admission. Note in applicant's specification, on page 9 in the second full paragraph, applicant states that "the sapphire single crystal is widely used as a sapphire plate having a cleavage plane, parallel to the plane R, as a side plane, or especially as a sapphire plate substrate."

15. Claims 1-4, 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Setsune (JP 61-121042). Setsune discloses a sapphire single crystal body 1 comprising a cleavage plane parallel to a plane R (see the translated abstract, "end faces 16 and 17 of a substrate 1 are produced by cleavage along the R surface of a sapphire") of the crystal on the surface.

16. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Morita et al (5,753,966). Morita et al discloses a sapphire single crystal body 1 comprising a cleavage plane (see the abstract, lines 6-12) parallel to a plane R of the crystal on the surface. Further, Morita et al teaches the single crystal body being a single crystal sapphire substrate of a laser diode (see column 1 lines 5-10) comprising a semiconductor multilayer 2 for laser light emitting use formed on a major plane ({11-20} plane or plane A), and the cleavage plane (see the abstract, lines 6-12) connected with a cleaved plane 3 of the multilayer 2 on a side face.

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With respect to claim recitation of a working reference plane parallel or vertical to the plane R of the crystal, see column 3 lines 59-67, which teaches a working reference plane parallel to the plane R ((1-102) plane) of the crystal being formed on the peripheral edge portion (see Figures 5A-5C) of the sapphire single crystal plate 1, and the working reference plane makes an index for forming on the plate 1 a microcrack line ( **striped grooves 18**) parallel to the plane R.

### *Conclusion*


Papers related to this application may be submitted to Technology Center 2800 by facsimile transmission. Papers should be faxed to Technology Center 2800 via the PTO Fax Center located in CP4-4C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Center's number is (703) 308-7724.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quyen Phan Leung whose telephone number is (703) 308-0545.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.



**Quyen Phan Leung**  
**Patent Examiner**  
**June 03, 1999**



**Rodney Bovernick**  
**Supervisory Patent Examiner**  
**Technology Center 2800**